CHAPTER IV

BEHAVIOURAL ATTRIBUTES OF FERTILITY
Fertility is the term used in demography to indicate the actual number of children born alive. Contrary to popular usage it refers to actual reproductive performances, and certainly not, possible performances. The term fecundity on the other hand is used to indicate the physiological ability to bear children and thus it is fecundity and not fertility which actually is directly opposite to sterility. Factors affecting the probability in a woman to become pregnant, is termed as fecundability. Which seems to be coined by an Italian demographer, Peterson op. cit. Gini 1924. He defined it as the probability of conception during any one month without the use of contraception and outside the period of gestation and of sterility following a offspring. However fertility could also be explained as the measure of the reproductive performances of woman as could be obtained from the statistical number of live births hence obtained.

The number of births occurring any year in a population is determined partly by demographic factors, such as age and sex distribution, the number of married
couples and their distribution by age, duration of marriage, and the number of children already born to them or vice versa. The number of factors other than this is also partly determined by many other factors related to the socio-economic environment of that particular time, such as housing conditions, education, income, religion, nutrition and current attitudes towards family size.

Need and necessity of fertility has been felt from the very beginning of social life. There are sufficient evidences to show that in the past, with the help of prayers, in many societies an effort was made to have fertility of barren women. It was always believed that a woman who was infertile was rather very unfortunate because she was not in the position to maintain a family sequence. As the time passed it was realised that the prayers on this account would remain ineffective but with the advent of scientific means minimised the barrenness changing it into fertility and as such scientific methods were later sensibly adopted.

A deliberate attempt to check fertility even in the past period of human history is not available, for the continuation of a particular tribe every effort was made. In the present century there is a growing feeling of not taking full advantage of fertility, and this is done usually through different ways, late marriage,
avoiding children for long time, limiting family size by using contraceptives, and in some societies even by following practice of infanticide particularly of girls, Peterson 1975.

The study of human fertility occupies central position in the study of population for several reasons. Human fertility is responsible for biological replacement and remains equally responsible for maintenance of human society. The growth of the population of the world depends entirely on human fertility. Thus in population dynamics fertility as a positive force, through which the population expands, counteracts the force of attrition caused by mortality.

Need and necessity of fertility has been felt from the very beginning of social life. Fertility depends to some extent on personal attitudes and aspirations which in turn is related to intelligence and education. Within the biological limits of human fertility several social, cultural psychological, as well as economic and political factors are found to operate.

It remains to be an authentic fact, that, if the replacement by human fertility does not bring about increase in human number, the inadequacy in any society would thus face the danger of becoming extinct. On the contrary excessive replacement of human number could
also create several social and political problems for the country.

Fertility has been noticed to have been dependent on physiological capacity of reproductivity which obviously is observed to be higher in the case of people with better health and vigour, while people suffering from ill health would invariably have lower fertility capacity. Fertility in ill health individuals remains negligible on account of least income inadequacy.

Various factors have been found or are logically believed to affect the fertility in a married couple. Some of these factors can be, in the way of personality, controlled or changed, by obviously, human efforts, such as income, addiction in a family. But there are some unavoidable factors which, on the contrary, remain beyond human control.

It seems to be generally accepted that almost every married couple, man as well as woman, desires to have children of their own, Bogue. op. cit. Prachuabmoh 1967.

Studies have revealed a great deal about the variations in fertility as measured by, gross reproduction rate, number of children of completed fertility, net reproduction rate, etc., among the various socio-economic groups, ethnic classes and other categories.
On the other hand, little has been written to show the extent to which differences in fertility attitudes and values as measured by ideal size of family compares with the differences in fertility as noted by other measures. As birth control methods have become more available to the various sectors of population; Bogue. op. cit. Mendoza 1967; preferences in the size of families tend to become an important component of fertility behavior.

The capacity to reproduce entirely lacking in childhood, begins to appear at puberty, develops gradually during adolescence and reaches a high point at maturity. In the female the menarche, or first menstruation is taken to define puberty. There have been many studies which analyses the age at menarche, Peterson op.cit. Pearl 1939; Kumar 1967, which clearly indicates several patterns, particularly its relation with better food, environmental factors and diseases which usually brings about variability in the onset of menarche. The menarche is only one step, the most clearly marked one, in a long process, and the regular development of healthy or it usually begins later which plays an important role in the way of fertility. Of course, the concentration of fertility on females, is obviously very common in various types of demographic reasearch. Fecundibility is a characteristic of the couple, which should become possible devise for diagnostic skill of reasonable accurate criterion of relevant physical characteristics of the two partners. The sample of subfecund couples,
unsuccessful to conceive for a year or more correlates with their individual aptitude. Individually a male could be responsible for fecundity on the basis of a sperm count and several other measurable characteristics of the spermatozoa, Peterson, 1975, and on the other hand females could also remain responsible in two characteristics, primarily in the regularity of menstruation cycle and ovulation and the state of Fallopian tube, which have been dealt in further chapters.

Age at marriage and its duration plays equally an important role in fertility. Female getting married at an early age are more fertile but during their later part of age fertility declines on account of their being prone to many diseases. Fertility in females is basically dependent on the good nutrients obviously which relates to health. Food requirements, include both a certain amount and a certain balance among various types of nutrients. Either a deficiency in quantity or an imbalance has its successive consequences on various aspects of well being in females as well as males which finally has an adverse affect on the health of individuals, Peterson, 1975.

The present chapter deals with the various socio-demographic aspects which could have left the various individuals to remain childless. In the process of interviewing these individuals their socio-economic
variabilities were taken an account of, hence, their age at interview, along with the age at which they were married and the duration of having been married had to be taken of, a very spectacular observations. Consanguinity in marriages on many an occasion leaves a barreness in the life of the couples.

The present chapter deals with the various variability of the sample under study, to understand the nature of distribution of various facts related to these variabilities.

From table 4.1 it becomes quite evident that majority of the male individuals belonged from the age group 31 to 35 years, while the females numbered more between the age group 26 to 30 years at the time of interview. Demographically this distribution is ideal on the basis of the fact that the percentage frequency of young and old individuals show no greater variability.
Table 4.2 gives us the detailed maximum percentage frequency amongst male at 24 to 26 years of age group, whereas the minimum percentage is noticed between the age group of 12 to 14 years. Females on the other hand presented a different trend regarding this trait, a maximum percentage frequency amongst them was observed to be between 18 to 20 years of age, while the minimum was noticed at 33 to 36 years of age. Eventually an important factor amongst females of their being married at an early age of 12 to 14 years and little above becomes more prominent. It can also be deduced from the observations made above that age at which a male is married is usually considerably much higher than the females. A second marriage amongst 5 male individuals was observed, which was rather a very unfortunate observations amongst female individuals also.
The duration of marriage of bearing children varies to a greater extent amongst the individuals. It obviously is evident from table 4.3 that the maximum percentage frequency of 4 years of barren marriage amongst individuals is observed. This frequency decreases to a greater extent at 5 years or more, of barren marriage as can be seen in the table 4.3.

The table 4.4 gives the detailed marriage performances amongst individuals. A very few individuals examined were either parallel cousins or cross cousins, but 51.81% and 52.94% amongst male and female were of no relation to each other, respectively.

Consanguinity in marriage was prevalent amongst muslims, and most of the obtained samples were parallel cousins hence infertility remained dominant in such families. The lower ethnic groups had a few of parallel cousins and cross cousins marriage performances.

Considerably higher frequency of distant marital relationship of about 24.10% amongst males and 23.88% amongst the female individuals. Such marriages were seen to be observed in a few of Jain families and Hindu families, a negligible percentage amongst Christian families. Consanguinity in marriage brings about childlessness and sometimes abnormalities in the offspring.
Table 4.5 gives the detailed analysis of Joint as well as Nuclear family distribution amongst the individuals. Maximum number of the individuals, though, were obtained from the Nuclear type of family, yet nearly about 39.76 per cent amongst males and 36.33 per cent amongst female individuals belonged to the joint families which was quite expected of the place.

Joint families specially amongst Jains, Muslims and a few Hindus were the most prevalent and common factor found amongst certain sample individuals. Despite erosion in the cost of living and, the most unbearable unemployment, within specially, the middle and low class people, yet the values of being in a joint family was a very clear aspect in the minds of certain individuals.

Nuclear family individuals, primarily, an outsiders settled here on account of their government services, and secondly, a few individuals had their individual settlement on account of space limitations.

Literacy percentage distribution amongst males and females has been given in table 4.6.
Literacy in males was observed much higher as compared to the females in the present sample. Higher education observed amongst females was a rather scanty, specially, amongst labour class, though the trend now-a-day have reversed on account of enlightenment of females as well as in their family backgrounds. Scanty education prevails here basically due to restrictions in the family traditions. The girls being considered as burden are married evidently at a very young age in many parts of this state despite restrictions layed by Government.

Economic status of the population can be determined by the income of the family, whether the income earned, be of a day, a month's, or, of an year. The annual income of a family is the total amoluments earned by all the members of the family, whether in a nuclear family or in a joint family. Table 4.7 indicates the economic status of the individuals undertaken for the present study.
Percentage frequency of the number of males in the middle order group was 47.59 per cent while maximum number of females were house-wives, with exception to about 17.99 per cent who were apart from being a house-wives were equal in supporting their partners (Table 4.7).

After having studied the standard of education of the population under study it is also equally essential to ascertain the occupational structure. Table 4.8 represents the maximum percentage frequency of labourer class both amongst male and female individuals. The next decreasing order of this frequency is obtained at business category, where, only male individuals were noticed to undertake any type of the business profession.

Considering the percentage frequency of the service class it was observed that majority of the male individuals were engaged in the service, whereas the females represented lesser percentage frequency in this trait, an important fact emerges from this study that maximum percentage of female individuals were engaged in domestic affairs (Table 4.8).
With regards to diet amongst the observed samples, more or less maximum percentage were seen to be vegetarian. Vegetarian individuals were basically wheat and rice eaters, occasionally jwar and bajara was also consumed by them.

The frequency of females being a pure vegetarian was 68.17 per cent whereas the males were comparatively lesser in this aspect. Males invariably are, more consumers for non-vegetarian, as compared to the females in a generalised statement (Table 4.9).

Drug addiction, whether in the form of smoking or consuming liquor, chewing tobacco, snuffing, or, in actual meaning extensively being habitual to any form of drugs has been proved by many workers to have been related to infertility as a primary cause of chromosomal aberrations. With this criteria kept in view the males and the females had to be observed on this particular aspect (Table 4.10).

Smoking and Chewing tobacco was the main prevailing habitual aspect amongst many males and a few females also. Frequency in percentage of smoking and chewing tobacco was much higher between the age of 20 and 21 years amongst males. On the contrary the females at a much later age were habitual to chewing tobacco, a few of the female individuals were observed at an early age, that is between 16 and 17 years.
The situation where the male members become habitual to smoking and chewing tobacco obviously is quite understandable, but the female getting into this peculiar habit has a authentic reason behind. There happens to be no industry in Saugor other than Bidi making. Hence job availability chances for poor ethnic group prevails only in these industries. The females in the process of helping their counter part to uplift the financial status of the family, they in the bargain while making bidis with their mechanical fingers get indulged in either smoking or chewing tobacco (Table 4.11).

In relation to the present study individuals with such habits had to be considered on account of variabilities which could exist in their reproductive performances. Much work has been done on males and females who do get indulged in either occasional smoking or drinking. Jennie et al., 1983, reported on maternal smoking and trisomy among spontaneous aborted conceptus and Rudak et al. 1978; Martin et al. 1983, 1984; Brandriff et al. 1984, 1985a; Sele and Pellestor 1985; Sele et al. 1985; Benet et al. 1986; Jenderny and Rohrborn 1986; Kamiguchi and Mikamo 1986, have analysed young health men selected for having no history of infertility, radiotherapy or chemotherapy, but were only occasional alcohol drinkers or cigarette smokers.
Numerical versus structural abnormalities were observed by them in their studies.

The measures of behavioural attributes of fertility performances is to a great extent dependent on socio-economic factors which in turn is related to many aspects which have been discussed in this chapter. The karyotyping analysis of childless or infertile couples can only be done after having measured the socio-demographic variabilities, which obviously play a very important role in one's life.